In a wry echo of the headquarters major, an elderly representative of the U.S. Operations Mission (USOM is the local alias of the Agency for International Development) said to me:

"We have some of the finest soldiers in the world assigned to South Vietnam. But what does a military man know about the people? Will they talk to a soldier, knowing what they do of soldiers? No. But I am a fat old man; they talk to me. They ask me why the United States talks about democracy while it is supporting a military dictatorship. They ask me why we talk about freedom when we are taking them from their homes and herding them into strategic hamlets, like criminals. I have no answer.

"What would he do for a Western victory in South Vietnam?

"We should cut our military advisers to the 1962 level, 5,000 or 6,000 men, and put the difference into volunteers who know the people, who want to help the people. Like the IVS workers (International Voluntary Service, similar to the Peace Corps and predating it). The people trust them. I have never heard of an IVS worker being harmed, or even threatened. Soldiers must travel in convoys here, but the IVS can go anywhere."

Quality goes down as numbers go up, but there is no doubt that several thousand young volunteers—teachers, nurses and technicians—could do far more than the same number of soldiers to bring Western ideals to South Vietnam. And they could do it far more cheaply. The Peace Corps has functioned admirably around the world without benefit of officers' clubs, post exchanges and all the other accessories that go with a U.S. Army compound.

It would be unfair to suggest that our military effort in South Vietnam is entirely confined to hunting the elusive Vietcong. The army is trying hard to adjust to the demands of revolution, by whatever name. "Civil action" is almost a cant phrase in military circles these days—there is even a new S–5 section in the Army staff organization, devoted to psychological warfare and civic action. Army engineers are digging wells and building bridges all over South Vietnam, and Special Forces is constructing a model farm near Pleiku where montagnard peasants can learn to use fertilizer and irrigation pipes. There are dedicated, inventive soldiers in every outfit, but any ex-GI knows how much of this dedication and inventiveness is destined to be smothered by the routine of army life. Whatever the U.S. military is doing now to help the Vietnamese, the same number of volunteer civilians could do far more.

Opportunities are particularly abundant in the central highlands where the montagnard population is only beginning to emerge from the dark ages. A few miles from Pleiku, the military headquarters for fully one-fourth of South Vietnam, I visited montagnard settlements which had never seen a doctor or a schoolteacher.

"Talk about people that don't have a chance," one American captain said in amazement. "What will these kids do with their lives? Why, I'll bet if you asked every one of the 400 people in this village who the premier of their country was, they wouldn't be able to tell you."

That was overstating the extent of education among the montagnards. Most of them do not know that they have a country, let alone a premier.

I asked the USOM representative in Pleiku why we did not spend more of our money for schools, instead of for armored personnel carriers. "A schoolteacher here earns 600 piasters a month—about $6," he said. "A coolie sweeping the streets can earn 30 piasters a day. We can't recruit enough teachers to staff the schools we are building."

So I asked him why we didn't match the teachers' salaries with an equal amount from American funds, and he could only shrug.

The highlands are an especially fertile area for such programs because they are militarily quiet. The Mekong Delta may have deteriorated too far for education, agriculture and medicine to win the countryside back from the Vietcong, and there a military solution may be the only feasible one. But the highlands are a different matter. The Vietcong operates only in small units, usually consisting of irregulars, and even the U.S. military regards two vehicles as a sufficient convoy in most areas. For this reason the highlands have the lowest priority in everything—even in the assignment of IVS and USOM workers. Yet if the military believed its own doctrine—that the revolution here is a war staged and supplied from North Vietnam—surely the opposite should be the case. The highlands are the logical infiltration route from Laos and Cambodia. If the montagnards were won over to the Vietnamese Government, the Vietcong supply line would be cut and (if the military view is correct) their war in the delta would be choked off. Whether the "masked aggression" theory is right or wrong, we are making a tragic mistake in the highlands.

More likely, the fighting in the delta would continue even if the highlands were pacified. But that is a military assessment, and our error in South Vietnam has been to think in military terms. A peaceful, prosperous central highlands would demonstrate to the rest of the nation that the Government has more to offer than the Vietcong. Victory for the West in this revolution waits upon that demonstration. If we make it, we shall win; if we do not, we deserve to lose.

I shall never forget the afternoon I watched three young men through binoculars, convinced that they were hard core Vietcong soldiers. They were strong featured and alert, dressed in black; they were cooking dinner behind a boulder about 500 yards from the spot where our strike force patrol was taking a 10-minute break. A squad had been sent out to encircle them. But the young men heard the snap and rustle of moving soldiers. They stood up, ready to flee. The American Special Forces sergeant in charge of the patrol decided to fire while he still had a target. He fired twice, aiming into a cleft in the boulder, and his buddy did the same. Then we sprinted up the hill. The three young men had fled, unharmed, leaving behind not weapons but a much-thumbed copybook of the kind used in rural schools.

The sergeant was troubled by the idea of shooting at schoolboys.

"Well, I'm glad we missed," he said. Then he brightened. "But if those guys weren't Vietcong an hour ago, they sure as hell are by now."

Things were right in his world again. He did not seem at all concerned by the likelihood that, instead of lessening the Vietcong threat, our patrol had added to it.

PROBLEMS IN THE MEDITERRANEAN

Mr. MORSE. Mr. President, I ask unanimous consent to have printed at this point in the RECORD an article entitled "Johnson's Problems in the Mediterranean," written by James Reston, and published in the New York Times of August 19, 1964.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

JOHNSON'S PROBLEMS IN THE MEDITERRANEAN

(By James Reston)

WASHINGTON, August 18.—The rising opposition in the Congress to U.S. foreign military aid is vividly illustrated by the current Greek-Turkish crisis over Cyprus.

For the Congress is now confronted by the fact that the Greeks and Turks are withdrawing U.S. military equipment from the North Atlantic alliance and threatening to use these American supplies on one another.

This has put the Johnson administration in a delicate and untenable position. The President does not want to pass judgment on who is to blame for the fighting on Cyprus, but at the same time, he cannot explain to the Congress why American arms intended to maintain the peace are being diverted for possible military action on Cyprus.

From 1946 to 1963, the United States supplied military aid to Greece totaling $1,656 million. The total for Turkey in this same period was $2,404 million. In the fiscal year 1963, the Greek allocation was $85,800,000 and the Turkish $160,800,000.

THE LEGAL RESTRICTIONS

That these impressive sums should be voted for arms to bring some kind of decent order into the eastern Mediterranean and then be used in part in the bitter communal struggle in Cyprus is the sort of thing that makes the Congress balk every time the foreign aid bill comes to debate.

President Johnson has been trying quietly to bring an end to the fighting. He sent this week a curt note to President Makarios ignoring the latter's plea for more aid and advising him bluntly to cooperate with the United Nations and avoid any action that might make the bitter struggle between the Greek and Turkish Cypriots any worse than it now is.

Meanwhile, disturbed by the Turkish use of American planes and arms to attack the Greek Cypriots, he has been in personal communication with the Turkish Government to halt all military activities. The answer of both the Ankara and Athens governments was to withdraw arms from the NATO command.

This sort of thing cannot, however, go on without placing the foreign aid program of the United States in jeopardy. In fact, continued defiance of Washington's requests for a peaceful settlement of the Cyprus dispute, and constant vilification of the United States for its efforts to produce a peaceful settlement there can easily force the President to cut off aid from both Greece and Turkey.

The bilateral agreement between the United States and Turkey on the furnishing of aid is quite specific on this point. The aid is made available by Washington to help secure the freedom and independence of Turkey and the allies. The U.S. retains the right to withdraw its equipment if its arms are used in such a way as not to further the interests of the United States.

Furthermore, section 506(d) of the Foreign Assistance Act of 1961 states that "Any country which hereafter uses defense articles or defense services furnished such country under this act * * * in substantial violation of the provisions of this chapter * * * shall be immediately ineligible for further assistance."

Also, the so-called Gruening amendment, to the Foreign Assistance Act of 1961, section 620(1), insists that "No assistance shall be provided under this or any other act * * * to any country which the President determines is engaging in or preparing for aggressive military efforts directed against (1) the United States, (2) any country receiving assistance under this or any other act (Cyprus is receiving assistance under the act)."

THE TURKISH ARGUMENT

There is little doubt here that American arms have been used in the Cyprus crisis in violation of these amendments, but the administration has been hesitating to invoke the law for fear of creating an even more serious crisis within the NATO alliance.

The Turkish argument apparently is that they not only have the right to withdraw their military units and American arms from NATO but that they are using these arms legitimately in protection of their treaty rights in Cyprus.

If this argument can be sustained, however, it is all the more likely to provoke new and sterner amendments to the Foreign Assistance Act to make sure that U.S. arms cannot be used legitimately in any such adventures in the future.

In fact, it is only the preoccupation of the Congress with the presidential election and other matters in the closing days before the Democratic Nominating Convention that is keeping the Cyprus controversy from provoking another anti-foreign-aid storm on Capitol Hill.

Meanwhile, pro-Greek elements in this country, which are vocal and influential in some of the big electoral States, are beginning to demand that military aid to Turkey be cut off and withdrawn. Thus the controversy affects not only the President's relations with the Congress and the allies, but with the voters as well, and he will no doubt be forced to act unless he begins to get some kind of settlement of the dispute before long.

DOCUMENTATION OF MILITARY POWER

Mr. MORSE. Mr. President, one of the most useful documents published anywhere in the world is the annual summary of military power, published by the Institute of Strategic Studies, in London. If one sought in the United States the information that is contained in this document, much of it would be marked "Secret." This bears out the point which the senior Senator from Oregon has made for many years, namely, that the American people are being given a "snow job" by their Government. Citizens are being denied access to the public business in regard to the military power of the United States. It is business which they are entitled to know.

This British document contains much military information that one cannot get from the Pentagon.

This article shows how perfectly absurd our so-called top secret policy is in the United States. It serves for the most part only to deny to the American people the facts which they should have if they are properly to judge and to appraise the unsound policies of the United States in the field of military aid and in the building up of a war machine in this country far beyond the kind of war machine we need to protect the security of the free world.

In my judgment, as I have said this annual summary of the world's military power published by the Institute of Strategic Studies in London, is one of the most useful documents published anywhere in the world.

As I did last year, I am going to have it printed in the CONGRESSIONAL RECORD, so that it will be more readily available to Americans who are interested in the facts of the world's military power.

I particularly call attention to the analysis of the military strength of Communist China. This report indicates that while China maintains an armed force of 2,476,000, it has 130 million men of military age. It also estimates that China's military power has declined over the last 5 years, and that its concentration of forces has moved away from the Taiwan Straits to China's northern and southern borders.

I also point out that the Institute estimates the size of the Soviet Army at no more than 2,300,000 and possibly only 2 million. It also describes a 25 percent downward revision of Soviet tactical air strength, and a doubling of the number of nuclear-powered submarines compared to last year.

I ask unanimous consent to have the entire publication "The Military Balance, 1963–64" printed in the CONGRESSIONAL RECORD.

There being no objection, the material was ordered to be printed in the RECORD, as follows:

THE MILITARY BALANCE, 1963–64

FOREWORD

This is the fifth of the Institute's annual estimates of the nature and size of military forces of the principal powers involved in the cold war. It covers the Communist bloc and those countries with which the United States has mutual defense treaties. This year information has also been included on a number of important nonalined countries.

The institute assumes full responsibility for the facts and judgments which the pamphlet contains. It owes a considerable debt to a number of its own members and consultants who have cooperated in compiling and checking the material. However, not all countries have been equally cooperative in producing information and some figures have been estimated.

This pamphlet examines the military balance as it existed at the end of October 1963, and as it will, on present indications, change during the ensuing year. No longer-range projections of force levels or weapons beyond 1964 have been included.

The material in this pamphlet should not be regarded as a comprehensive guide to the nature of the balance of strategic power: it does not reflect the facts of geography, vulnerability, efficiency, etc., on both sides. It may, however, be found useful in the context of discussions on disarmament and the general balance of power.

Note on the figures

Manpower figures given are those of regular forces, although an indication of the size of paramilitary forces, militia or reserve forces, has been given in the sections dealing with individual countries. Naval strengths are those of active fleets and ships in commission only, except where otherwise stated. All vessels of less than 100 tons standard displacement have been excluded. Fighting ships below 400 tons have been classed as light coastal units. Figures for defense budgets are exclusive of American military aid. Fighter and strike squadrons of allied air forces have 25 aircraft and wings have 75 aircraft, except where otherwise stated.

PART I. THE COMMUNIST POWERS

The Soviet Union, population: 225 million

The main lines of Soviet defense policy in 1963 have changed little from those of the preceding 2 years. The slow buildup of the strategic deterrent force of ICBM's is continuing. Soviet policy still lays stress on high-yield warheads for the small number of missiles available. It would appear that the deployment of MRBM's is now complete. The procurement of the longer range IRBM's, of the type which were first publicly known to be operational when launching pads for them were built in Cuba in 1962, is probably continuing.

Defense expenditure has increased slightly. This is probably due to the demands of research and development, and to some extent of the modernization of the armed forces. It is notable that the U.S.S.R. is continuing the procurement of medium-range supersonic bombers which are clearly expected to continue in service for the foreseeable future. Though the Soviet Union has a force of fleet ballistic missiles, it is doubtful whether Soviet claims to have developed a true equivalent to the American Polaris submarines can yet be taken literally.

But although the main lines of Soviet policy are unchanged, there have been a number of developments which indicate changes of emphasis, and to some extent of force levels. In the spring of 1963, the Chief of the General Staff, Marshal Zakharov, was replaced by Marshal Biryuzov who had previously held the key posts of chief of Soviet air defense from 1955–62 and commander of the strategic rocket forces from 1962–63. The increasing influence of officers with a scientific background which this indicated is likely to continue. Marshal Malinovsky, the Defense Minister, may be the last of the generation of military commanders whose authority arises from the part they played in the Second World War. It should, however, be noted that the book "Military Strategy," edited by Marshal Sokolovsky, has been criticized in the Soviet Union over the past year, not only for ignoring the importance of scientific developments in determining military strategy, but also for paying no attention to the political and ideological factors in maintaining morale and military efficiency. The debate between traditional military leaders and younger technocrats will doubtless continue in the years ahead. From the Soviet viewpoint the most noticeable feature of the Sokolovsky book was perhaps the fact that for the first time it presented an accurate picture to the Russian public of the strategic strength of the United States. The book has been criticized for ignoring the possible circumstances in which nuclear weapons could not be used if war broke out: the significance of this criticism may be revealed when the revised edition of the book appears later this year.

The test ban treaty is unlikely to inhibit Soviet development and advance in the one field where Soviet prowess is apparently inferior to that of the United States—very low yield nuclear weapons. Official doctrine has, however, laid little stress on these in the past. The treaty may inhibit the antiballistic missile program, but it would appear that the Soviet Union has resigned itself to a period without any effective defense against missiles, and believes that the same will be true of the United States. This resignation seems to be a part of the general Soviet approach to the present strategic confrontation: it appears that the Soviet authorities are debating future policy in terms of their own resources and of the current strategic controversies within NATO before they decide whether any large reorientation of their own policy is necessary.

Meanwhile the Sino-Soviet dispute provides a complicating factor. Apart from 17 Soviet divisions in the Far East, troops already in central Asia, and a few detachments beyond Lake Baikal, the Soviet Union has no military formations, other than border guards, along its border with China. There is unlikely to be any shift of forces from Europe or European Russia, but there might be military pressure for a reactivation of the cadre divisions in the Soviet Union, and a reorganization of naval and air defense. It is doubtful whether this policy will be put into effect. In European Rus-

sia the reorganization of the Soviet forces has resulted in a reduction of the number of men in uniform rather than an increase. The Soviet Union is also feeling the effects of the low birth rate of the war years, although the age for compulsory registration was lowered from 18 to 17 in 1962. (The figures of youths of military age will begin to increase again after 1965.) It was announced in September 1963 that all those born in 1944 would now be called up. But the size of the Soviet forces in October 1963 was estimated at a maximum of 3,300,000 men, or 300,000 less than in the autumn of 1962.

The Soviet defense budget for 1963 (calendar year) shows an increase of about 4 percent over the preceding year, but the proportion of the total budget being spent on defense is about the same. The 1963 defense budget totals $15,400 million. This does not include space or defense research. At a realistic rate of exchange this figure would translate at about $34 billion.

Rocket Forces

The present figure of operational ICBM's is in the neighborhod of 100. It is uncertain how many of these are the second generation ICBM which appears to have a storable liquid fuel and which has been under development in recent years. This is likely to be easier to conceal than those of the first generation. The proportion of these in service is probably low. Soviet ICBM's have powerful boosters and larger warheads than their American counterparts.

A number of ICBM sites have now been hardened, but it appears that Soviet policy relies to a great extent both on concealment and on active defense measures for protection. There is no evidence that the Soviet Union has made any further progress than the United States in developing a reliable antimissile system at an acceptable cost.

The number of MRBM's is now stable at a total of about 750. These are deployed in sufficient numbers to deal with strategic and semitactical targets—such as fighter airfields—in Western Europe, including Britain, and in the Far East. There are two types, one with a range of 700 statute miles, the other with a range of 1,100 statute miles. They are sited near the western, southern, and eastern borders of the Soviet Union, on the Pacific coast and in Siberia. The IRBM which has been operational for over a year has a two-stage liquid fueled engine with a range of 2,100 miles. This force is still building up. The strategic missile forces are now under the command of Marshal Krylov.

Air Forces

The air force comprises about 12,500 operational aircraft, organized into five major components, namely:

1. The long-range strategic bomber force.
2. The tactical, or front-line force, which includes fighters and tactical bombers.
3. The fighter interceptor force of air defense command.
4. The land-based fleet air arm.
5. The air transport force.

The heavy bomber force has been kept at a considerably lower strength than that of the U.S. Strategic Air Command, though the general lines of development, including stand-off bombs and missiles, are similar. On the other hand the Soviet Union has built up a very strong force of medium bombers suitable for use all over the Eurasian theater and its coasts, which may now be in process of reduction, and an efficient light bomber force. The following gives some indication of Soviet air power:

(i) Strategic striking power

The strategic bomber force consists mainly of the following aircraft:

(a) 70 Turboprop Bears (TU–20); now able to carry one large winged missile.

One hundred and twenty 4-jet Bisons; now able to carry a winged missile.

(b) 1,000 twin-jet medium bomber Badgers (TU–16). In addition the naval air force contains a strike force of about 400 Badgers with winged missiles for ship attack.

(c) A twin-engined supersonic medium bomber, the Blinder, now coming into service with a long-range air-to-ground missile. This is probably a replacement for Badger.

LRAF is grouped in three areas: western Russia, the central Ukraine and in the Far East. In addition airfields in the Arctic are maintained for training, dispersal, and staging purposes.

(ii) Tactical air power

The U.S.S.R. probably has about 3,000 tactical bombers (this is a reduction of about 25 percent on earlier estimates). Older aircraft like the turbojet IL–28 Beagle have now been largely replaced. The Flashlight B with transonic capabilities and a radius of action of about 570 miles has entered into service, and large numbers of a further development of this aircraft, the supersonic Firebar A are operational. A number of other developments indicate the intensive work that has been going on in the field of high-performance aircraft. The tactical bomber forces still contain, however, a large proportion of obsolescent aircraft, such as the Mig–15 in a fighter-bomber role. It is basically an interdiction force.

(iii) Air defense

The number of ground-to-air guided missiles has steadily increased and an extensive early warning system is in operation. The quality of fighter aircraft in service has also improved. The following are details of air defense weapons:

Ground-to-air guided missiles: An antiaircraft missile which has a slant range of 18 miles.

A two-stage solid fuel missile which has been in service for some time. Its slant range is 20 miles, and it is effective at a height of well over 12 miles (60,000 feet).

There is also a higher altitude guided missile.

Fighters: The number of operational aircraft is probably about 8,000. The most common standard fighter in air defense formations is the Sukhoi Fishpot C, a supersonic aircraft with four air-to-air rockets. The chief multipurpose long-range interceptor, which can also carry both bombs and guided weapons, and two long-range air-to-air missiles is the Yakovlev Fiddler. Its maximum speed is about mach 1.9. A number of other supersonic interceptors have also been developed including Flashlight C.

The most important day fighters are:

	Maximum speed (miles per hour)	Ceiling (feet)
Mig-19 Farmer	900	55,000
Mig-21 Fishbed	1,200	60,000
SU-15 Fishpot	1,300	60,000
SU-? Fitter	1,400	60,000

The Mig–23 Flipper may now also be in service with a speed of about mach 2.5.

There are 500,000 men in the Soviet air and rocket forces, a slight reduction on earlier years.

Land Forces

The size of the Soviet Army and the number of active divisions have been somewhat reduced in recent years as the cost of complex new equipment has come to consume an increasing proportion of the Army's budget, and as the country has encountered endemic manpower problems. The total size of the Army is now estimated at a maximum 2,300,000 men. Some Western authorities believe the Army may now number no more than 2 million men.

It is organized in about 150 divisions. Geographically their distribution is as follows:

1. Eastern Europe, 26.
2. European Russia, 75.
3. Far East, 17.
4. Central Russia, 32.

Of these 150 divisions, about half are capable of undertaking operations without reinforcement, a quarter would need limited reinforcement, while the balance, which are at cadre strength, would require major reinforcement.

The Soviet mobilization capacity is large, and in theory all the 150 divisions could be at full strength after 30 days uninterrupted mobilization.

By types of division the distribution would be approximately:

1. Armored or tank divisions: 50 (of 9,000 men, 430 medium and heavy tanks at full strength).
2. Motorized divisions: 100 (11,000 men, 195 medium tanks at full strength).

It will be noted that the size of Soviet divisions has markedly decreased.

The airborne forces total approximately 70,000 men in 9 divisions. The resources of the transport fleet would allow two divisions plus other elements to be airlifted simultaneously over short to medium ranges.

The 20 Soviet divisions in East Germany (10 tank, 10 motorized) are among those maintained at full strength. There are two divisions in Poland (one tank, one motorized) and four divisions in Hungary (two tank, two motorized). This force of 26 divisions could be reinforced to a total of some 70 divisions in 30 days if unimpeded by interdiction.

The military value of the satellite armies is hard to assess, despite recent improvements in equipment. Some could undoubtedly be used as a substitute for Soviet divisions if Soviet communications and logistics were disrupted in the event of war.

The major reorganization of the Soviet Army to meet the conditions of nuclear warfare has led to an increase in nuclear firepower and mobility, to a reduction in conventional artillery, and in the overall size of divisions, although this has not significantly affected their nonnuclear firepower. Tactical missile units are now organic to all formations including the Soviet forces in East Germany. The main emphasis of training continues to be the advance of tank and APC-borne infantry formations across radiation-contaminated ground at an average rate of 60 miles a day. This is in accordance with Soviet doctrine which envisages a major offensive role for the ground forces in the event of nuclear war.

The Soviet Union has not shown as much interest as the United States in the development of very low yield nuclear missiles for tactical purposes, but all the missiles mentioned below are designed to carry nuclear warheads. The Soviet Army also has an offensive chemical capability and is well trained and equipped for chemical defense.

Soviet Army equipment includes:

(i) Tanks

The standard medium tank (T54/55) has a 100-millimeter gun. The 54-ton heavy tank (T.10) has a 122-millimeter gun. Soviet tanks can deep-wade up to about 15 feet.

(ii) Artillery

The Soviet Army remains strong in artillery. Field guns are towed and the main types are 85 millimeter, 100 millimeter, 122 millimeter, 130 millimeter, and 152 millimeter. The main antitank gun is 57 millimeter. Self-propelled assault guns are

becoming obsolescent except in airborne divisions. The Soviet Army has also retained a considerable air defense capability and has surface-to-air missiles, LAA guns and AA heavy machineguns.

(iii) Missiles

Tactical missiles for use by the ground forces include those with ranges from 10 to about 300 miles, some of which are carried on modified tank chassis. The smaller missiles are all on amphibious tracked chassis.

Seapower

The Soviet Navy, including the naval air force, is manned by about 500,000 officers and men. It is the second largest navy in the world with a total fleet of about 1,600,000 tons.

(i) Submarines

The main strength of the Soviet Navy continues to lie in the submarine fleet, which comprises some 420 units. Over 300 of these are ocean-going. It is estimated that there are now 20 nuclear-powered submarines (this figure has doubled in a year.) There are four fleets: 70 conventional submarines are based in the Baltic, at least 150 in the Arctic, 50 in the Black Sea, and 120 or more in the Far East. There are estimated to be at least 30 missile-carrying submarines with a strategic role with the Arctic and Far East fleets. It is not known what proportion of these 30 can launch missiles when submerged.

The following are details of the conventionally powered submarine fleet:

F class: about 300 feet long, has a displacement of 2,000 tons, and a large radius of action. At least 10 of these are in service. This is basically a submarine hunter.

G class: 310 feet long and has a submerged displacement of 3,000 tons. It has a very large conning tower for the vertical launching of missiles which are fired when on the surface.

The W class makes up the bulk of the Soviet submarine fleet. It is 245 feet long, with a displacement of 1,050 tons. It has a speed of 16 knots on the surface, and 13 knots submerged, and a radius of action of 10,000 miles.

The R class is a modernized form of the W. Together, these comprise some 200 submarines.

Z class: 290 feet long with a submerged displacement of 2,600 tons. It is capable of 20 knots on the surface and 13 knots submerged, with a radius in excess of 20,000 miles. There are at least 20 of these in service. A small number have been converted to fire missiles, probably in a manner similar to the G class. They are stationed principally in the Arctic and the Far East.

There are two other classes of submarines, both of small displacement and designed for operations in the Baltic and Black Sea; the K and Q types. The K is now becoming obsolete. The Q is still serviceable, and has a radius of action of 3,500 miles.

(ii) Surface ships

The surface ships of the Soviet Navy consist of: Cruisers, 19; destroyers, 100; missile firing destroyers, 12; fast patrol boats, many with surface-to-surface missiles, 400; other vessels, 2,000. (There are a number of disguised trawlers used for radar and reconnaissance purposes).

These are distributed more or less equally among the four fleets. The cruisers are of three different types:

Sverdlov: Launched between 1951 and 1957, displacement 20,000 tons, speed 34 knots, armament twelve 152-millimeter guns and 32 antiaircraft guns. One or two have recently been reequipped with medium-range surface-to-air missile launchers, probably as an experiment.

Chapayev: Completed between 1948 and 1951, of 11,500 tons displacement, with the same speed and armament as the *Sverdlov.*

Kirov: Launched between 1936 and 1945, displacement 8,500 tons; speed 30 knots; armament nine 180-millimeter guns and 20 anti-aircraft guns.

New destroyers include:

Kynda class: Displacement 6,500 tons; speed 35 knots; armament: 16 surface-to-surface missiles; 30 surface-to-air missiles; 4 antiaircraft guns; 6 torpedo tubes; 2 antisubmarine missile launchers.

Krupny class: Displacement 4,500 tons; speed 35 knots; armament: 12 surface-to-surface missile launchers; 16 antiaircraft missiles; 6 torpedo tubes; 2 antisubmarine missile launchers.

Kildin class: Displacement 3,800 tons; speed 35 knots; armament: 6 surface-to-surface missile launchers; 16 antiaircraft guns; 2 antisubmarine missile launchers.

Ketlin class: Displacement 3,800 tons; speed 35 knots; armament: 20 antiaircraft guns; 10 torpedo tubes; other antisubmarine weapons.

(iii) Fleet air arm

There are no aircraft-carriers in the Soviet Navy, but there is a land-based Naval Air Force with about 750 aircraft. It is estimated to have 500 bombers, of which about 450 are based on the European shores of the Soviet Union. They consist mainly of:

(a) The TU 16 *Badger*—range of 3,500 miles;

(b) The torpedo-carrying IL 28 *Beagle*, with a range of 1,500–1,800 miles;

(iv) Sea-to-ground missiles

The Soviet claim, that a true Polaris-type missile, which can be fired from a submerged submarine, has been successfully developed, must be treated with caution. But the Soviet Union has not neglected fleet missiles. There is a cruise missile with a range of about 100 miles, which can be fired from a surfaced submarine. There is also a 400-mile ballistic missile of which some 90 are deployed on G and Z class submarines for surface firing. There are also 12 missile-firing destroyers.

Paramilitary forces

Although the Soviet DOSAAF organization is several million strong, the active participants in intensive paramilitary training probably number about 1½ million. There are also 300,000 security and border troops.

THE WARSAW PACT

There has been a considerable improvement in the coordination of the forces of the Warsaw Pact over the past year, and it appears to be taken more seriously by the Soviet Union as a military organization. Communications and command and control procedures had begun to be improved at the time of the Berlin crisis in 1961. There has been a noticeable growth in the efficiency of the Polish and East German armies, though the latter is not well-equipped. The probable order of efficiency of the Warsaw treaty powers is: Poland, Bulgaria, East Germany, Czechoslovakia, Rumania, Hungary, Albania.

(NOTE.—It is only possible to present defense expenditures on a standard basis by using official exchange rates which may distort the true value of defense budgets in these countries.)

Poland

General

Population: 31 million.

Length of military service: Army 18 months, air force and navy 3 years. There is also a form of service of 27 months in the internal security forces.

Total regular forces: 257,000.

Defense budget: $911,000,000.

Army

Total strength: 200,000; 14 divisions organized on Soviet lines, 4 are armored divisions, 9 are motorized, and 1 is airborne.

There are 2,750 tanks.

Navy

Total strength: 12,000; 7 submarines, 3 escort vessels, 12 minesweepers, 4 coastal minesweepers, 80 other ships.

Air force

Total strength: 45,000; 5 fighter regiments, mainly with Mig–19's and Mig–21's are being introduced, 4 ground attack regiments, mainly with Mig–17's 2 bomber regiments with IL 28's.

Paramilitary forces

Including armored brigades of the frontier defense force: 45,000.

Bulgaria

General

Population: 8 million.

Length of military service: 2 years. Total regular forces: 135,000. Defense budget: $256 million.

Army

Total strength: 110,000; 10 divisions, of which 2 are tank, and 8 motorized. They are maintained at about 50 percent of war strength. There are about 2,300 tanks, mainly T–34's with a number of T–54's.

Navy

Total strength: 5,000; 3 submarines; 3 escorts, 11 minesweepers, 9 coastal minesweepers, 60 smaller craft.

Air Force

Total strength: 20,000; 2 interceptor groups and a reconnaissance group, each consisting of 2 squadrons of Mig–17's. An independent interceptor is reported to be reequipping with Mig–21's. A fighter-bomber group has Mig–15's. A fighter-bomber group has Mig–15's. There is a small transport group.

Paramilitary forces, 10,000.

Czechoslovakia

General

Population: 14 million. Length of military service: 2 years. Total regular forces: 185,000. Defense budget: $789 million.

Army

Total strength: 150,000; 15 divisions: 2 tank and 12 motorized. One of the three Czech armies may soon be reorganized into a tank army with three tank divisions and one mechanized infantry division. There are 3,000 tanks. T–54's and T–10's are now replacing older Soviet tanks. The army is maintained at approximately 65 percent of war strength.

Air Force

Total strength: 35,000; 5 interceptor regiments equipped with Mig–17's, Mig–19's and Mig–21's; 4 ground attack regiments with Mig–15's and Mig–17's. The total firstline strength is about 400 aircraft.

Paramilitary forces, 35,000.

East Germany

General

Population: 17 million. Length of military service: 12–18 months, according to specialization. Total regular forces: 116,000. Defense budget: $65 million.

Army

Total strength: 90,000; 6 divisions, of which 2 are tank, and 4 motorized. There has been a great increase in the firepower of the East German Army over the past 18 months, and motorization is now proceeding rapidly. There are about 1,500 amphibious vehicles, including tanks.

Navy

Total strength: 11,000; 4 escorts, 16 minesweepers, 135 small vessels. A program of landing craft construction, begun in 1961, suggests a growing interest in amphibious operations.

Air Force

Total strength: 15,000; 2 air divisions of interceptors with MIG 19's and 21's, and MIG 15 and 17 fighter-bombers. Each division

has three wings of three squadrons. First line aircraft total about 400.

Paramilitary forces

Excluding the 350,000-strong Kampfgruppen (some formations of which provide a serious military force) there are 60,000 security and frontier troops.

Rumania

General

Population: 19 million. Length of military service: 2 years. Total regular forces: 227,000. Defense budget: $342 million.

Army

Total strength: 200,000; 13 divisions, 9 infantry divisions and supporting tank and artillery elements, 1 tank division, 3 motorized divisions.

Navy

Total strength: 7,000; 2 submarines, 3 escorts, 14 minesweepers, 22 coastal minesweepers, 24 other ships.

Air Force

Total strength: 20,000; three fighter regiments, each possessing two wings of three squadrons. It is believed that Mig–21's are beginning to replace the Mig–17's, one light bomber regiment with IL–28's. Paramilitary forces: 60,000.

Hungary

General

Population: 10 million. Length of military service: 2½ years. Total regular forces: 99,000. Defense budget: $277 million.

Army

Total strength: 90,000; five divisions, one armored, four motorized. There are about 1,000 tanks, for the most part T–34's, with some T–54's.

Air Force

Total strength: 9,000; three fighter regiments, each of two groups of three squadrons. Reequipment with Mig–21s began in 1962, but the bulk of the interceptor force is still Mig–17's; one bomber regiment with IL–28's. Surface-to-air missile batteries equipped with Soviet missiles.

Paramilitary forces, 35,000.

Albania

General

Population: 1,800,000. Total regular forces: 35,000. Albania is still nominally a member of the Warsaw Pact,though there is now minimal cooperation with her other allies, and she is the principal European champion of Chinese views.

Army

Total strength: 25,000; 5 brigades.

Navy

Total strength: 2,800; 4 submarines, 350 other ships.

Air Force

Total strength: 7,200; 2 squadrons Mig 17's.

Paramilitary forces, 10,000.

China

Population: 726 million.

Total armed forces: 2,476,000.

The armed forces are organized by the ministry of defense, advised by a national defense council which is presided over by the chairman of the Central People's Government. Control is exercised through 13 military regions.

There were about 130 million men of military age in 1963. Only about 700,000 men, a small proportion of potential conscripts, are called up each year. They serve 3 years in the Army.

In addition, the declared intention of the Chinese Government is to embody every third person in the population in the militia, but this is still scantily armed and sketchily organized. It is as much a labor as a defense force. There are about 300,000 men in the public security force, including the armed police.

There has been a gradual debilitation of Chinese military power over the last 5 years. The size of the armed forces is growing, and may be further increased, but their effectiveness is not increasing.

There has been some movement of troop concentrations away from the Fukien area over the past year, which suggests that the main preoccupations of the Chinese Government now lie in the Indian border region, and possibly to the north.

Some equipment is beginning to become obsolete. The last deliveries of Soviet military material were in 1960. Apart from a few Chinese prototypes, the only tanks possessed by the army are some T–34/85's and T–58's. The latest combat aircraft are Mig–19's.

Army

Total strength: 2,250,000: 120 divisions. There are two or three armored divisions and one is an airborne division, supporting troops and cavalry for desert areas. There appears to be a barely adequate supply of small arms up to light antitank weapons, but artillery and ammunition are scarce. The army is not a highly mobile organization. It is tied to a rudimentary railway network, and faces heavy transport and logistic problems.

Navy

Total strength: 136,000, including marines. There are 31 submarines, of which about half are Soviet W Class Four escort ships.

Air Force

Total strength: 90,000. There are perhaps 2,000 firstline aircraft, of which some 25 percent are light bombers, mainly IL–28's. The bulk of the remainder are Mig–15's and Mig–17's, and a small number of Mig–19's. The most modern transport available to the Chinese Air Force is a small number of British *Viscounts*. There are perhaps 10,000 pilots, but shortage of fuel prevents adequate training.

North Vietnam

Population: 17,000,000.

Both the Soviet Union and China still appear to be giving active assistance to support a conscript army of about 250,000 in 15 divisions, but the arms supplied appear, apart from some mortars in the hands of the Vietcong guerrillas, to be less modern than those used by the Vietminh in the final stages of the Indochina war. Paramilitary formations total about 100,000 men. The Vietcong guerrillas operating from North Vietnam are estimated to total between 25,000 and 30,000 men.

North Korea

Population: 10,000,000.

It its not known how far the Soviet-North Korean mutual defence treaty, concluded in 1961, remains in force in the circumstances of the Sino-Soviet rift. The North Korean Army is estimated at 280,000 men, organized in 16 divisions. The Air Force has about 30,000 men, and some 500 aircraft, mainly Mig–15's.

Cuba

Population: 7,200,000.

The Soviet forces in Cuba totalled some 17,000 men in March 1963, according to American official statements. There is reason to suppose that this number had diminished by about 9,000 by October. They are equipped with modern armaments which include a surface-to-surface missile (with a nuclear capability and a range of 25 miles), and modern antitank missiles. There are 24 antiaircraft missile sites. There are also T–54 tanks, SU–100 assault guns, and wheeled APC's. The Soviet air units on the island are estimated to have some 42 Mig–21's, equipped with air-to-air missiles.

The Cuban army totals about 90,000, and there is a strong militia of 200,000 men and women. It is organized only at battalion level, and equipped with light and heavy mortars, some light tanks, self-propelled artillery and light antiaircraft guns suitable for low-flying aircraft. The Cuban Air Force appears to have Mig–17's and Mig–19's and a small number of IL–28s.

The navy has 4 old cruisers and perhaps 25 modern Soviet torpedo boats.

PART II: THE WESTERN ALLIANCES

Strategic nuclear forces

Both the United States and the United Kingdom maintain substantial forces specifically designed for strategic nuclear retaliation. France is creating a striking force for the same purpose.

(1) U.S. air and missile power: the U.S. strategic retaliatory forces are expected to deter war with the Soviet Union by an ability to destroy Soviet warmaking potential, including nuclear strike forces, military installations, and urban society itself.

Strategic Air Power

The present force of about 1,300 strategic bombers in the Strategic Air Command will be reduced to about 700 in the next 2 years if the plans to phase out some 600 B–47 bombers are carried through. No new strategic bombers are on order. The main element of the bomber force is 630 intercontinental B–52's organized into 14 wings based on the continental United States. These aircraft carry a heavy and varied bomb load. The B–52G series are equipped with two Hound Dog air-launched missiles. There have been suggestions that both these and the B–52H series would be adjusted to carry four Hound Dogs. The B–52H bombers were designed as the platform for the skybolt airborne ballistic missile which was canceled in late 1962. Quail decoy missiles are carried by B–52's. There are two wings of the B–58 Hustler supersonic medium bombers in frontline service. Plans to procure large numbers of these aircraft have been dropped. The fleet of 600 KC–135 tankers for refueling bombers in flight is being enlarged for supporting the B–52 and B–58 bombers in the 1965–68 period. These tankers also support tactical aircraft.

Strategic Missiles

All 13 planned Atlas squadrons are in place. Of the total of 126 missiles, 60 are on hardened sites. Some of the 66 soft-based missiles are to be phased out, though the dates have not been decided. All but a few of the 108 Titan missiles are deployed on hardened bases and this buildup is due to be completed by the end of 1963. Minuteman solid-fuel missiles which can be fired from underground are being ordered in large numbers, with 800 due to be in place by the middle of 1965. Funds have been voted for a total of 950. About 180 Minuteman missiles are now in place and this force is being increased at a rate of 20 a month.

Ten nuclear submarines each with 16 Polaris missiles are in commission. Eight more are due to enter service before mid-1964. The first 5 carry the Polaris A–1 missile, the 6th to the 18th the Polaris A–2 and the balance of the planned fleet of 41 will carry the Polaris A–3. The 5 submarines equipped with the Regulus missile (a total of 17 missiles) are being phased out.

Command and Control

The command and control system of the Strategic Air Command is now part of the Strategic Retaliatory Forces program. Fifty percent of the manned bomber force is maintained on a 15-minute ground alert. A fleet of specially equipped KC–135 command post aircraft has been acquired and B–47's have been converted for communications relay. This airborne element of the postattack command and control system is already in operation and the system will be com-

pleted by mid-1964. To give the long endurance which this airborne system cannot achieve, a deep underground support center is being created.

(2) British airpower: The medium bomber squadrons of Royal Air Force Bomber Command consist of Vulcan and Victor bombers, Mark 1 and Mark 2. This force of about 180 aircraft is equipped with thermonuclear weapons in the megaton range; and the later marks of aircraft are equipped with the Blue Steel air-launched missile. Targeting for general war has for some years been done jointly with the U.S. Strategic Air Command. The force has now been assigned to the European command of NATO. A force of all-weather Valiant bombers, armed with both nuclear and conventional weapons, was already committed to Allied Command Europe. Bomber Command keeps a proportion of its aircraft on ground alert.

(3) French air power: The first of 50 Mirage IV supersonic light bombers appears to have entered service in October 1963. They are being equipped with medium-yield atomic bombs (probably about 60 kilotons). The force is being given strategic striking range by the purchase of 12 KC–135 tankers from the United States which will be delivered at the end of 1963. A Commandement Aérien Stratégique has been formed and targeting is the responsibility of a committee of the Secrétariat de la Defénse Nationale. The Government is constructing a permanent command post; and the operations center of the Strategic Air Force is also being made a hardened installation. It is planned to put 30 percent of the available aircraft on a 5-minute alert status. Training flights will, as far as possible, be done with weapons.

(4) Seapower: The United States at present maintains 15 attack carriers in commission, nine of them of the *Forrestal* class. The U.S. Navy has a large inventory of aircraft with a nuclear capability of the order of 1,000 planes or more. These include the subsonic A–4C Skyhawk, a newer version, the A–4E, a smaller number of A–3D Skywarriors, and the supersonic A–5 Vigilante. However, the nuclear retaliatory functions of the carrier are passing to the Polaris force, and it is probable that the attack carrier force will be reduced to 12 ships and its limited war role given high priority.

The Royal Navy maintains four carriers for which there will be three squadrons of Buccaneer aircraft capable of delivering a thermonuclear bomb, by the end of 1963. The French, Netherlands, and Canadian carriers do not have a nuclear capability.

North American air defense

This has been conducted for 6 years by a joint Canadian-American command, Norad, at Colorado Springs. Its function is the defense of the continent against manned bomber attack, and the alerting of SAC and other retaliatory forces in the case of a missile attack.

Norad's air defenses consist of about 1,500 fighters, the F–101, the CF–101, F–102, F–104, and F–106, about one third of which are manned by the National Guard. One-third of this force is maintained on 15-minute ground alert. Its missiles include 160 Bomarc A (250-mile range) and about 170 Bomarc B (440-mile range). The Canadian Government has now agreed to create stockpiles of nuclear warheads for Bomarcs and CF–101's based in Canada. In addition there are 180 Nike batteries around the major cities and industrial targets of the United States; the Nike-Hercules can carry a nuclear warhead and is said to have a slant range of 75 miles; the older nonnuclear Nike-Ajax is being phased out by the middle of 1964.

Norad's warning system stretches halfway across the Northern Hemisphere. Its central components are: (a) three lines of radar stations across northern and central Canada, which are extended by air and seaborne radar pickets into the mid-Pacific and the eastern Atlantic; (b) a space detection and tracking system (spadats) which keeps an inventory of all objects in space and extends warning to the southern quarter of Northern America; (c) the ballistic missile early warning system (BMEWS) which is designed to provide 15 minutes warning of missiles on the United States. There is one station in Alaska, one in Greenland, and one in Yorkshire; and (d) a bomb alarm system which would automatically provide data on nuclear explosions resulting from an attack on North American targets.

No decision has been taken to install an antimissile defense system though about $500 million a year is spent on the study of alternative systems.

Strategic Army reserves

The deepening nuclear stalemate between the great powers has given a strategic significance to mobile ground forces. The United States has a Strategic Army Corps of three divisions (two airborne, one infantry) with headquarters in North Carolina. This is under joint Army-Air Force command, and one division is maintained in a high state of readiness. The British strategic reserve consists of one division of two infantry brigades and one paratroop brigade based in southern England. France is developing a "force d'intervention" of one division. Canada has one brigade designed for such a role.

North Atlantic Treaty Organization

There are three major military commands in NATO—those of Europe, the Atlantic, and the Channel, respectively. Of these only Allied Command Europe has national forces assigned to its operational control in peacetime. However, all three commands include earmarked forces—forces which member countries have agreed to place at the disposal of the commanders in the event of war. Other forces remain under national control either to insure the defense of the national territories or to meet commitments outside the NATO area.

The number of tactical nuclear weapons deployed in Western Europe has increased by 60 percent in the last 2 years. The principal army weapons involved are Honest John at brigade or divisional levels and Corporal and Redstone at corps or army levels. The United States is the only NATO country which has produced any nuclear warheads appropriate for operational ground based missiles and she retains control over them even when the missiles themselves are operated by other national forces. Under the "double-key" arrangements, which is being reinforced by a "permissive link" or electronic lock, the nuclear warheads can only be fired by the mutual agreement of the United States and the host country. During 1963 Pershing and Sergeant have started to replace Redstone and Corporal, respectively, in the U.S. 7th Army. Pershing will be acquired also by the Bundeswehr. The 7th Army has introduced Davy Crockett mortars, which can throw a nuclear or high explosive shell 2,000–4,000 yards, down to the level of armored reconnaissance companies but it appears that nuclear warheads are retained at a higher echelon. There are about 25 of these mortars in each of the 7th Army divisions.

The NATO infrastructure program in Europe has been responsible for the development of 220 standard NATO airfields capable of all-weather operation of all types of aircraft. They constitute the chief bases for the 5,500 or so tactical aircraft belonging to the air forces in Europe of the NATO powers. Other major infrastructure achievements include the building of 5,300 miles of fuel pipelines together with storage tanks for 160,000 tons and the construction of 27,000 miles of communications and signals networks.

Certain pieces of equipment have been designated as standard for NATO although this does not mean that they have been, or are intended to be, introduced into all national forces. The major weapons systems concerned include the F–104G Starfighter and Fiat G–97 fighters, the Bréguet 1150 Atlantique maritime patrol aircraft, the Hawk ground-to-air missile launcher, the Bullpup guided bomb, the Sidewinder air-to-air missile, and the MK 44 homing torpedo. F–104G's are being produced jointly by Belgium, Germany, Italy, and the Netherlands. Germany is to receive 700 of the total, Italy 125, the Netherlands 120, and Belgium the remainder. Over 250 F–104's have now been delivered under this program. Other multilateral programs include one for enough Hawks to equip 22 battalions on the central front. Nine nations have been producing Sidewinders since 1961. Early in 1964 Bullpups being manufactured jointly by Britain, Norway, Denmark, and Turkey will start entering service. Later in 1964 the first Bréguet Atlantiques, will enter service.

1. Allied Command Europe

This has its headquarters near Paris and it covers the land area extending from the North Cape to the eastern border of Turkey excluding the United Kingdom, the ground defense of which is a national responsibility, and Portugal which falls under Allied Command Atlantic. It also includes Danish and Norwegian coastal waters.

Following a decision taken at the NATO Council meeting in May 1963, a deputy to the supreme commander (a Belgian general) has been appointed with special responsibility for nuclear planning. At the same time the United States assigned three Polaris submarines to the supreme commander and Britain her V-bomber force.

The following field commands are subordinate to Allied Command Europe:

(a) Allied Forces Central Europe has its headquarters in Fontainebleau and comprises 26 divisions[1] (out of a proposed 30) assigned to the Supreme Commander as follows:

Germany	10
United States	6
United Kingdom	2⅓
France	2
Belgium	2
Netherlands	2
Canada brigade group	1

The tactical air forces available include some 3,500 aircraft of which 500 or more are American fighter-bombers, a smaller number of British Canberras and Valiants, and F–104G and CF–104G of several air forces have a nuclear capability and the range to cover important sections of Western Russia. An integrated early-warning and air defense system has been developed for Britain, West Germany, the Low Countries, and Northeast France.

The command is subdivided into Northern Army Group and Central Army Group. Northern Army Group is responsible for the defense of the sector north of—roughly speaking—the Göttingen-Liége axis. It includes the British and Benelux divisions, 3 of the German divisions, and the Canadian brigade. It is supported by 2d Allied Tactical Air Force which is composed of British, Dutch, Belgian, and German units. Other land forces are under CENTAG and other air forces under the corresponding air command—4th ATAF.

So far seven countries have committed one or more reinforced infantry battalions to form a mobile task force. It is intended that this group should have nuclear weapons and organic air and sea transport. It is to serve as a mobile reserve for NATO as a whole.

Central Europe is taken to include the Heligoland Bight and so the command would control the German North Seas Fleet and part of the Dutch Navy in the event of war.

(b) Allied Forces northern Europe has its headquarters at Kolsaas, in Norway and is

responsible for the defense of Norway, Denmark, Schleswig-Holstein, and the Baltic approaches. All the Danish and Norwegian land, sea, and tactical air forces are earmarked to it. The Germans have assigned one division, two combat air wings, and their Baltic Navy.

(c) Allied Forces southern Europe has its headquarters in Naples and is responsible for the defense of Italy, Greece, and Turkey. The forces assigned include 14 divisions from Turkey, 8 from Greece, and 7 from Italy, as well as the tactical air forces of these countries which comprise some 1,000 warplanes. Various other divisions have been earmarked for AFSOUTH and so has the U.S. 6th Fleet which would become Striking Force South if NATO became involved in war.

(d) Allied Forces Mediterranean has its headquarters in Malta and is primarily responsible for safeguarding communications in the Mediterranean and territorial waters of the Black Sea and for protecting the Sixth Fleet. The national fleets and maritime air forces of Italy, Greece, and Turkey, together with the British Mediterranean Fleet, are assigned to or earmarked for this command.

2. Allied Command Atlantic

This has had its headquarters at Norfolk, Va. The duties of Supreme Allied Command Atlantic in the event of war are (a) to participate in the strategic strike and (b) to protect sea communications from attack from submarines and aircraft. For these purposes the eight NATO naval powers which border on the Atlantic have earmarked forces for exercises and, if need be, for war. Saclant is responsible for the North Atlantic area north of the Tropic of Cancer including the northern North Sea. Three subordinate commands have been established—Western Atlantic area, Eastern Atlantic area, and striking force Atlantic. The nucleus of the NATO striking force is provided by the U.S. Second Fleet with its two or three attack carriers.

There are probably about 450 escort vessels serving in the navies of the nations concerned of which a high proportion are wholly or partly designed for antisubmarine work. About 250 of these are normally serving outside the Atlantic area. Most NATO navies are equipping and training their submarine forces primarily for ASW and well over 150 boats are potentially available in the Atlantic for such duties. The 8 nations in Allied Command Atlantic also have about 375 long-range land-based maritime patrol planes in operation, a large majority of which are stationed on or near Atlantic coasts. Furthermore, the U.S. Navy alone has over 1,000 carrier-borne specialist antisubmarine fixed-wing aircraft and helicopters of which about half are embarked at any one time. Another 300 or so are serving in the other navies concerned. The overall total that could be quickly operational from carriers out on Atlantic sea stations is probably around 400.

All these estimates include units earmarked for Channel Command.

3. The Channel Command

The role of Channel Command is to exercise maritime control of the English Channel and the southern North Sea. Many of the smaller warships of Belgium, France, the Netherlands, and the United Kingdom are earmarked for this command as are some maritime aircraft.

NATIONAL FORCES

BELGIUM

General: Population: 9,260,000. Length of military service: 12 months. Total armed forces: 110,000 (34 percent conscripts). Defense budget: $444 million.

Army: Total strength: 85,000; 2 infantry divisions with M–47 tanks; 2 reserve divisions; 1 paracommando regiment. The active divisions are NATO assigned and the reserve ones are earmarked for NATO.

Navy: Total strength: 5,000; 4 escorts, 47 minesweepers.

Air Force: Total strength: 19,000; 2 F–104G squadrons, 4 F–84F fighter-bomber squadrons, 1 transport wing with 35 C–119G's, 4 Nike Ajax/Hercules batteries are located in Germany. All the Air Force and naval units are NATO assigned.

CANADA

General: Population: 18,930,000. Military service: voluntary. Total forces: 124,000. Defense budget: $1,480 million.

Army: Total strength: 50,000. In Canada: three infantry brigade groups, two of these are earmarked for NATO, the third forms the Defense of Canada Force, one battalion is available for U.N. service. In Europe: 1 Canadian infantry bridgade group; 50,000 militia.

Navy: Total strength: 22,000. One aircraft carrier with one squadron of Tracker aircraft and one squadron of helicopters; 26 destroyers, 17 frigates, 10 minesweepers, 4 submarines (3 on loan from United Kingdom), 4 squadrons of shore-based aircraft.

Air Force: Total strength: 52,000. Europe: One air division of 8 squadrons in France and Germany. The 8 squadrons are to be equipped with 200 CF–104 Super Starfighter aircraft by the end of 1963. North American Air Defense: 5 squadrons of CF–101B Voodoo aircraft, 2 Bomarc B squadrons. Coastal aircraft: 3 Argus squadrons on the east coast. (NATO earmarked); one Neptune squadron on the west coast; 800 Army and 80 RCAF personnel in UNEF Middle East. 280 Army and 24 RCAF in the Congo.

DENMARK

General: Population: 4,690,000. Length of military service: 14 months in Navy, 16 months (24 months for NCO's) in the Army and Air Force. The standard period is to be reduced to 14 months in the Air Force and parts of the Army in 1964. Total armed forces: 49,000. Defense budget: $225 million. The Danish forces are earmarked for NATO.

Army: Strength: 33,600 (75 percent conscript); 2⅔ armored infantry brigades each with 6,000 men in 5 battalions including one tank battalion with Centurions; 2 Honest John battalions (with high explosive warheads only); 4 reservist armored infantry brigades; 56,000 Army Home Guards for local defense.

Navy: Strength: 7,000 (75 percent conscript); 18 escorts, 3 submarines, 12 minesweepers, 20 other ships.

Air Force: Strength: 8,400 (75 percent conscript); 3 F–100's, 3 F–86's and 1 Hunter squadron with C–47's and C–54's, 1 air/sea rescue squadron with helicopters and amphibians, 1 RF–84F tactical reconnaissance squadron, 1 Nike Ajax and Nike Hercules battalion. In the autumn of 1964, 29 F–104G's are scheduled to be delivered.

FRANCE

General: Population: 48,100,000. Length of military service: 18 months. Total armed forces: 636,000. Defense Budget: $4,062,000,000.

Army: Total strength: 430,000. In terms of command organization, the French Army is organized on two separate lines: The forces de manoeuvre, which are divided into the forces under national command stationed in France, the forces assigned to NATO, and the land component of the French strategic reserve, the forces d'intervention. The forces du territoire which are organized at local brigade or regimental level. In terms of divisions, the organization is 3 light divisions of 3 brigades each, which will be fully equipped in 1965. They will receive the new AMX light tank. One airborne/marine division. Two divisions in Germany, one mechanized and one armored. They are equipped with Honest John launchers. Over 2,000 French troops are stationed in Berlin. There are still 60,000 troops in Algeria. Withdrawal from Bizerta is almost complete.

Navy: Total strength: 76,000; two 22,000 ton aircraft carriers, one 10,000 ton carrier, one 10,000 ton helicopter carrier, two cruisers, one experimental guided missile ship, 72 escorts, 24 submarines, of which 6 are oceangoing, 210 other ships.

The greater part of the French fleet will be transferred from its Mediterranean station to the North Atlantic over the next 18 months. The Mediterranean squadron at present comprises some 40 ships, including 3 aircraft carriers.

Naval Aviation includes 4 fighter squadrons with 80 Etendard IV aircraft, 3 Alizé ASW squadrons, 5 Neptune maritime reconnaissance squadrons, and 3 helicopter squadrons. Deliveries of 25 F–8E Crusaders are due to begin in 1964.

Air Force: Total strength: 125,000. (a) Strategic Air Command (see p. 12); (b) Air Defense Command: 9 Super Mystère squadrons, 3 Vautour squadrons; (c) 1st Tactical Air Force (1st CATAC), has 450 combat aircraft assigned to the 4th Allied Tactical Air Force. They include 9 F–84F squadrons that will start to convert to Mirage III E's in 1964, 6 F–100D squadrons, 6 Mirage III C squadrons, 3 Mystère IV A squadrons, 3 RF–84 F squadrons that will convert to Miracle IIIR in 1964, 2 Nike-Ajax and Nike-Hercules brigades in Germany.

GERMANY

General: Population: 55,000,000. Length of military service: 18 months plus 9 months reserve full-time training liability up to the age of 45. Total armed forces: 404,000 (160,000 conscripts). All except the territorial force are NATO assigned. Defense budget: $4,607,000,000.

Army: Total strength: 256,000, plus a territorial force of 27,000 held for rear area duties; 7 armored infantry divisions, 3 armored divisions, 1 mountain division, 1 airborne division. One of the divisions is not yet completed. The battle tank force contains about 1,500 M–47's and 1,000 M–48's.

Navy: Total strength: 28,000. Naval air wing; 68 Sea Hawks and 15 Gannets, 42 escorts, 62 minesweepers, 18 submarines, 69 light coastal units, 9 amphibious warfare craft, 50 other ships.

Air Force: Total strength: 92,000; 4 Sabre fighter wings, 2 F–104G fighter-bomber wings, 4 F–84F fighter-bomber wings (to convert to F–104G's in 1964), 4 F–104G and Fiat–G91 R reconnaissance wings, 3 Noratlas transport wings, 6 Nike-Hercules battalions.

GREECE

General: Population: 8,500,000. Length of military service: 18 to 24 months. Total armed forces: 160,000. Defense budget: $167 million.

Army: Total strength: 120,000; 11 infantry divisions of which 3 are kept close to full strength in peacetime, 1 armored division with M–47 tanks, 8 divisions are NATO assigned. Some Honest John batteries are in service.

Navy: Total strength: 19,000; 14 escorts, 2 submarines, 6 minesweepers, 15 light coastal units, 29 amphibious warfare craft.

Air Force: Total strength: 22,000; 3 F–84F fighter-bomber squadrons, 3 F–86 fighter squadrons, 1 RF–84F photoreconnaissance squadron. Over the next 2 years about 40 F–104G Starfighters and some Northrop F–5A's are to be procured. Nike-Ajax and Nike-Hercules batteries.

ITALY

General: Population: 50,270,000. Length of military service: 18 months for the Army and Air Force, 24 months for the Navy. Total armed forces: 470,000. Defense budget: $1,510 million.

Army: Total strength: 380,000 (including 80,000 carabinieri); 5 infantry divisions with M–47 tanks, 2 armored divisions with M–47

tanks, 5 alpine brigades, 5 independent infantry brigades, 1 independent cavalry brigade with M–47 tanks, 1 parachute brigade (7 of the divisions and some of the independent brigades are assigned to NATO).

Navy: Total strength: 40,000; 2 cruisers, 62 escorts, 6 submarines, 74 minesweepers, 14 light coastal units, 72 other ships.

Air Force: Total strength: 60,000. (a) Assigned to 5th Allied Tactical Air Force: 3 F–104G strike squadrons, 2 F–86E day fighter squadrons, 4 F–84F fighter-bomber fighter squadrons, 2 G–91 fighter-bomber squadrons, 3 F–86K all-weather fighter squadrons, 2 RF–84F photoreconnaissance squadrons, 2 C–119G transport squadrons, 3 Nike-Ajax and Nike-Hercules squadrons, (b) Under national command: 3 F–86E day fighter squadrons, 3 SA–16A air-sea rescue squadrons, 3 Tracker antisubmarine squadrons.

LUXEMBORG

General: Population: 323,000. Length of military service: 9 months; defense budget: $7,000,000.

Army: Total strength: 5,500. An infantry brigade would be available to NATO after mobilization.

NETHERLANDS

General: Population: 12,000,000. Length of military service: 20–24 months, plus 15 years reserve liability; total armed forces: 141,000; defense budget: $618,000,000.

Army: Total strength: 98,000. 2 mechanized divisions assigned to NATO. 1 infantry division, 3 infantry brigades and army corps troops to be formed by call-up of reservists earmarked for NATO. 8 active and 2 reservist tank battalions are organic to the above formations. They have a total of 600 Centurion tanks. Honest John units are in service.

Navy: Total strength: 22,000, including 3,000 marines; 1 16,000-ton carrier, 2 cruisers, 27 escorts, 5 submarines, 68 minesweepers, 2 amphibious warfare craft. Naval aviation includes: 1 Sea Hawk strike squadron, 4 ASW squadrons equipped with P–2H Neptune and S–2F Trackers, 2 helicopter squadrons.

Air Force: Total strength: 21,000. (a) Assigned to 2d Allied Tactical Air Force: 4 F–84F fighter-bomber squadrons; 1 RF–84F photo reconnaissance squadron; two of the fighter-bomber squadrons will be equipped with F–104G's by late 1964. (b) Under national command: 4 fighter squadrons with Hunters and F–86K's. By 1965 two of these will have been reequipped with F–104G's and the others disbanded. The 6 Nike-Ajax and Nike-Hercules squadrons will increase to 8 in the near future; 12 Hawk squadrons are soon to be established; 1 transport squadron.

NORWAY

General: Population: 3,670,000. Length of military service: 16 months for the Army, 18 months for the Navy and Air Force. Total armed forces: 36,000. Defense budget: $197,000,000.

Army: Total strength: 18,000. Two active brigades of which one is in Arctic Norway. This brigade has an Honest John battery attached with high explosive warheads, but this is soon to be disbanded. These brigades have M–24 light tanks. Mobilization would produce 10 reservist brigades plus supporting units. This force would total 75,000. Local defense and home guard forces are 100,000 strong.

Navy: Total strength: 8,000 including 2,500 coast artillery, 8 escorts, 7 submarines, 11 minesweepers, 11 other ships.

Air force: Total strength: 10,000; 4 F–86F squadrons, one of which is now converting to F–104G's; 3 F–86K squadrons; 1 RF–84 photo reconnaissance squadron; 2 HU–16 Albatross maritime patrol squadrons; 1 C–119 and C–47 transport squadrons; 4 Nike Ajax and Nike Hercules sites are located around Oslo.

PORTUGAL

General: Population: 9,200,000. Length of military service: 18 to 25 months for the army, 36 for the air force, 48 for the navy. Total armed forces: 102,000. Defense budget: $176 million.

Army: Strength: 80,000 plus 14,000 African troops. Half the Europeans are conscripts. About 40,000 European and 7,000 African troops are serving in Angola; 16,000 European troops are serving in Mozambique and 6,000 in Guinea.

Navy: Total strength: 9,700 plus 500 marines; 14 escorts; 3 submarines; 18 minesweepers; 43 light coastal units; 11 other ships.

Air force: Total strength: 12,500 including 3,500 parachute troops; 300 aircraft including 2 squadrons of F–86F Sabres, and 1 reconnaissance squadron of P–2V Neptunes. The Neptune squadron is NATO assigned.

TURKEY

General: Population: 29,500,000; length of military service: 2 years for the army and air force; 3 years for the navy; total armed forces: 452,000; defense budget: $235 million.

Army: Total strength: 400,000; 16 divisions most of which have 5 brigades: 14 with Honest Johns are NATO assigned, 6 armored brigades with M–47 tanks, 2 independent parachute battalions, Nike-Ajax and Hercules units are deployed. There are 2,500,000 reservists.

Navy: Total strength: 32,000; 18 escorts, 29 minesweepers, 10 submarines, 27 other ships.

Air Force: Total strength: 20,000; 1 F–104 G fighter-bomber squadron, 10 F–100 fighter-bomber squadrons, 4 F–86 interceptor squadrons, 1 RF–84F photographic reconnaissance squadron (all these are NATO assigned), 1 C–47 and C–54 transport wing.

UNITED KINGDOM

General: Population: 53,800,000, voluntary military service. Total armed forces: 429,000; defense budget: $5,140,000,000.

Army: Total strength: 189,000 (of which 14,000 are Gurkhas); the army is organized into 68 battalions, of which 57 are British infantry battalions, 3 are parachute battalions, and 8 are Gurkha infantry battalions; 22 armored regiments, of which the normal distribution is 14 tank regiments and 6 armored car regiments; 31 artillery regiments; and engineer and signal regiments. About 80,000 men are maintained in the United Kingdom, including the Strategic Reserve of 2 infantry brigades and a parachute brigade. The British Army of the Rhine, based in Germany, has about 53,000 men. It is being reorganized into 3 divisions, each of 2 brigades, which could reach their full wartime establishment with the use of reserves from the Territorial Army and Army Emergency Reserve. Air defense is provided by the Thunderbird surface-to-air guided weapons. Some artillery regiments have a nuclear capacity with the Corporal and Honest John missiles and 8-inch howitzers. These are being supplemented by the 175-mm. American medium gun.

1 British brigade is maintained in Kenya as a theater strategic reserve and British, Australian, and New Zealand troops together form a Commonwealth brigade in Malaysia. Other garrisons include 3,000 men in Berlin, 6,000 men in Borneo, and troops in Hong Kong, Aden, Libya, Cyprus, Malta, Gibraltar, and the Caribbean.

There are 157,206 men in the Territorial Army and 122,236 in the Army Emergency Reserve.

Navy: Total strength: 96,000; ships in the operational fleet and on trials and training include: 4 aircraft carriers, 2 commando carriers, 3 cruisers, 4 guided-missile destroyers, 13 other destroyers, 52 frigates, 1 nuclear submarine, 35 conventional submarines, 62 minesweepers, 4 landing ships, 4 landing craft, 89 fleet support and other ships.

In addition, 263 ships (including one aircraft carrier, 4 cruisers, 56 destroyers and frigates, 18 submarines, and 119 minesweepers) are in reserve or undergoing major modernization.

The Fleet Air Arm has a nuclear strike capacity with Bucaneer bombers and Scimitar fighter-bombers. The air defense of the fleet is carried out by County class destroyers with the Sea Slug and Seacat guided weapons, Sea Vixen interceptors armed with Firestreak, and Scimitars armed with Sidewinder. Wessex and Wirlwind helicopters serve in both the antisumbarine and the commando-carrying role.

The Royal Marines are organized into 5 commandos of 600 men each.

There are 11,589 men in the naval and marine reserves.

Air Force: Total strength: 138,000.

(a) Bomber Command: see page 12.

(b) Fighter Command is equipped with Lightning interceptors armed with Firestreak air-to-air guided weapons and with Bloodhound surface-to-air guided weapons. Deployment of the air transportable Bloodhound 2 is beginning.

(c) Coastal Command is equipped with Shackleton long-range reconnaissance and antisubmarine aircraft.

(d) Transport Command has 23 Britannia and 10 Comet airliners for strategic airlift. In addition, it is acquiring 11 long-range jet VC–10's for passengers and freight and 10 long-range Belfasts for heavy equipment. Two medium-range Argosy freighter squadrons have been built up in Britain, 1 in the Middle East and 1 in the Far East. Short-range transport squadrons in Britain and Germany are being steadily increased and there is a steady rise in the numbers of helicopters.

(e) RAF Germany is equipped with Canberras for nuclear and conventional interdiction and for photographic reconnaissance. Javelin interceptors armed with Firestreak have taken over the all-weather fighter role of the command.

(f) RAF Near East in Cyprus is equipped with Canberra bombers in support of CENTO and Canberra and Shackleton reconnaissance aircraft. RAF Middle East in Aden is equipped with Shackletons and Hunter fighter/ground attack aircraft. RAF Far East is equipped with Shackletons, Canberras, Belvedere helicopters, and Hunter FGA's.

UNITED STATES

General: Population: 189,440,000. Length of military service: selective service for 2 years. Total Armed Forces: 2,700,000. Defense budget: The administration requested $52,400 million for the period mid-1963–64. This includes military aid and certain projects on which funds would not necessarily be spent during that period. It appears probable that the amount voted by Congress for current expenditure will be $47,280 million.

Army: Total strength: 975,000.

The Army is organized into 16 divisions—5 mechanized, 6 infantry, 3 armored, and 2 airborne. The divisions have now been reorganized from their pentomic systems designed for nuclear war to the ROA Dsystem, which with a three-brigade structure is adapted to frontal conventional war. New units are now being created to study the possibilities of substantially increased air mobility for troops. Tests of the costs and military effectiveness of two types of unit are being carried out: (1) air assault divisions equipped with 460 aircraft (including helicopters) with air transportable weapons; and (2) air cavalry brigades for flanking or rear attacks on an enemy in helicopters using large numbers of antitank weapons.

The Seventh Army, with 240,000 men, is stationed in Germany and 3 divisions are maintained in the Far East. The Seventh Army is organized into 3 mechanized and 3 armored divisions. Reequipment with the M–60 tank should be completed late in 1964. This tank, with its 105-millimeter gun, is considered necessary only in Europe; formations in other areas will continue with the M–48 tank (90 mm. gun) until the new main battle tank is developed. New solid-fuel bombardment missiles are being deployed in Europe. Redstone is being replaced by Pershing and Corporal by Sergeant. In addition, the tactical nuclear weapons available include substantial numbers of Davy Crockett mortars and Little John, Honest John, and Lacrosse missiles. Large numbers of Hawk, and Nike-Hercules anti-aircraft guided weapons are deployed with the Army and production orders have been placed for the light mobile Mauler air-defense missiles; 6,000 men are in Berlin.

The Special Forces, the Army's specialized troops for counterinsurgency operations, are being reorganized. The force structure is being increased from four to six groups with a total strength of 5,600 men.

The Army Reserve contains 274,500 men and the Army National Guard 375,500. They will provide: (1) 6 divisions, 11 brigades, and the units needed to round out the Active Army within 8 weeks of mobilization; (2) two theater reinforcement divisions for Alaska and Panama with 4 to 12 weeks readiness; (3) 21 divisions and other nondivisional units to be ready within 24 to 36 weeks.

Navy: Total strength: 665,000.

The general purpose fleet is 836 ships (for fleet ballistic missile submarines, see p. 11). It is divided into four fleets: the 1st in the Eastern Pacific, the 2d in the Atlantic, the 6th in the Mediterranean and the 7th in the Western Pacific. The 6th and 7th Fleets are each built around 3 aircraft carriers.

The ships of the Active Fleet are approximately as follows: 15 attack aircraft carriers, 11 support aircraft carriers, 3 command ships, 12 guided missile cruisers, 8 light and heavy cruisers, 240 escorts, 19 nuclear-powered submarines, 86 conventional submarines.

In addition, there are over 400 escorts and about 16 cruisers in reserve. The Active Fleet and Reserves include about 250 amphibious ships, 220 minesweepers, and 870 service, patrol, and other craft.

The Navy has approximately 7,000 aircraft in its inventory. In the interceptor role, the F–8 Crusader is being built up in numbers and will later be replaced by the F–4B Phantom. In the attack role, the Navy is acquiring A–4E Skyhawk light aircraft for close support and the A–6A Intruder for all-weather low-level strike. Both aircraft are subsonic and able to carry either nuclear or conventional weapons. The supersonic A–5C Vigilantes now in service are being modified to a dual attack and reconnaissance role. A carrier-based long-range search aircraft, the S–2E, is being put into service and rising numbers of the SH–3A antisubmarine helicopter.

The manpower strength of the Naval Reserve is 126,000. A force of 40 antisubmarine destroyers and escorts and 12 mine warfare vessels is kept ready at sea at all times. About 700 ships are maintained in the "mothball" fleet.

Marine Corps: The Marine Corps maintains 190,000 men organized into 3 divisions and 3 air wings. The Regular force also maintains the nucleus of a 4th division/air wing which can be formed in a few weeks by calling up the Marine Corps Reserve. The Reserve now stands at 45,500 men. It is planned to expaid the aircraft strength of the Marine Corps to give the air mobility being considered for elements of the U.S. Army. Like the Navy, the Marine Corps is replacing its Crusader fighters (F8U) with the Phantom 2 (F–4H). The reconnaissance version of the Phantom (the RF–4B) will give the corps day and night photographic capability. Procurement of equipment is going ahead in a quantity adequate to allow all 4 divisions to stay in combat for a substantial period of time and to allow two-thirds of the 4 air wings to remain in combat. Various types of chemical ammunition are included in the buildup.

Air Force: Total strength: 865,000. Strategic Air Command: see page 11. Continental missile and air defense forces: see Norad, page 12.

The General Purposes Forces of the Air Force include bombers, fighter-bombers, fighters, reconnaissance aircraft and missiles with a tactical role. (The Strategic Air Command has taken over responsibility for the air-refuelling of these squadrons.) It has been decided to embark on a rapid modernization of the 21-wing tactical fighter force. This is now equipped with the F–84, F–100C, F–104, and F–105 fighter-bombers as well as B–57 tactical bombers. The modernization is based on large orders for the F–4C Phantom 2 and later the F–111 (TFX). Reconnaissance squadrons, which are now based on the RF–101 and RB–66, are being increased in numbers and equipped with the RF–4C reconnaissance version of the Phantom. Air defense for installations behind battle areas is provided by the F–102 interceptor. 5 Mace A bombardment missile squadrons are maintained in Europe on soft bases. One squadron of the hardened Mace B missile is in Europe and two are in Okinawa. Tactical aircraft are being given protection against non-nuclear attack by the construction of earth-covered steel shelters.

The Air National Guard contains 72,000 men and about 500 aircraft organized into 19 fighter squadrons and 13 reconnaissance squadrons. The re-equipment of the active tactical fighter force will give the Guard a substantial number of supersonic F–100, F–101 and F–104 aircraft as well as increased numbers of F–84's. The Air Force Reserve, which provides units for supporting aircraft dispersed to civilian airfields, contains 61,000 men.

Central Treaty Organization

The members of CENTO are Pakistan, Iran, Turkey (p. 20) and the United Kingdom (p. 20). The United States is an associate member, but is represented on the coordinating Council of military deputies and on the economic and countersubversion committees. CENTO does not have an international command structure nor are forces allocated to it. The air striking power is supplied by British Canberra bombers based on Cyprus, and the U.S. Sixth Fleet.

IRAN

General: Population, 21,800,000. Length of military service, 2 years. Total armed forces, 208,000. Defense budget, $170 million.

Army: Total strength, 200,000 plus a gendarmerie of 30,000; 12 infantry divisions and 6 independent brigades, there are M–47, Sherman and T–34 tanks.

Navy: Total strength, 1,000; 2 escorts, 3 minesweepers, 5 other ships.

Air Force: Total strength, 7,000; 3 F–84G fighter-bomber squadrons. These are expected to start converting to Northrop F–5's in the course of 1964; 1 transport wing with 4 C–130B Hercules and some C–47's.

PAKISTAN

General: Population: 98,570,000. Voluntary military service. Total armed forces: 253,000. Defense budget: $240,000,000.

Army: Total strength: 230,000; 8 divisions organized on a triangular basis and equipped with Patton tanks, 250,000 lightly armed militia and about 30,000 Azad Kashmir troops.

Navy: Total strength: 7,700; 7 escorts, 6 minesweepers.

Air Force: Total strength: 15,000; 250 aircraft including 2 B–57 B light bombers squadrons (these are a Canberra variant); 1 F–104 Starfighter squadron; 4 F–86F Sabre squadrons.

Southeast Treaty Organization

The members of SEATO are Australia, France, New Zealand, Pakistan, the Philippines, Thailand, the United Kingdom, and the United States. They are committed to build up collective economic and military strength and to consult with a view to joint defensive action in the event of direct or indirect aggression against a member or against the protocol states of Laos, Cambodia, and South Vietnam. The treaty area is the Southwest Pacific theater south of 21°30′ N. There is no central command structure and forces remain under national control. American support for the treaty powers is exercised by the 7th Fleet, based on Taiwan and the Philippines, and American air and ground forces based on Guam and Okinawa. The 28th Commonwealth Brigade (consisting of British, Australian, and New Zealand forces) plus supporting air units is based in Malaysia as are British naval forces which would operate in support of the treaty powers in the event of war. France maintains no forces in direct support of the alliance.

AUSTRALIA

General: Population: 11 million. Military service: voluntary. Total armed forces: 50,700. Defense budget: $533 million.

Army: Total strength: 22,700. 1 infantry battalion with artillery support in Malaysia, 1 tank regiment with 70 Centurion V's. Their 76 mm. guns are to be replaced by guns of 105 mm. caliber, 2 battle groups (large reinforced infantry battalions) becoming 3 over the next 12 months, 1 Pacific Island Regiment battalion. Others are being formed under a 5-year plan. There are 28,300 men in the Citizen Military Forces organized in 8 battle groups with armored car and Centurion support.

Navy: Total strength: 12,000; 1 fleet carrier (used for ASW), 1 carrier (fast transport), 8 escorts, 6 minesweepers, 5 other ships; 100 naval aircraft including: 1 Sea Venom all-weather fighter squadron, 1 Gannet ASW squardron, 1 helicopter squadron with 29 Wessex MK 31's.

Air Force: Total strength: 16,000; 4 F–86 fighter squadrons. These will convert to the Mirage III O beginning in March 1964; 3 Canberra bomber squadrons, 2 Neptune maritime reconnaissance squadrons, 3 transport squadrons with C–130 Hercules and C–47 Dakota, 18 Caribous will start entering service in March 1964, 1 Bloodhound Mk 1 surface-to-air missile squadron is in service.

NEW ZEALAND

General: Population: 2,550,000. Military service: voluntary. (This is supplemented by Selective National Service for 2,100 recruits annually for the army territorial force.) Total armed forces; 12,000. Defense budget: $87,000,000.

Army: Total strength: 5,000 regulars and 10,000 territorials; 1 regular brigade, including a battalion in Malaysia.

Navy: Total strength: 2,900; 1 cruiser, 7 escorts, 4 minesweepers.

Air Force: Total strength: 4,100; 1 Canberra light bomber squadron, 1 Sunderland maritime reconnaissance squadron, 3 transport squadrons.

PHILIPPINE REPUBLIC

General: Population: 27,500,000. Military service: voluntary. Total armed forces: 30,000 plus a paramilitary national police. Defense budget: $63,000,000.

Army: Total strength: 20,000; 1 active division, 3 cadre divisions. There is a reserve of 100,000 men.

Navy: Total strength: 4,000; 8 escorts, 2 light coastal units, 2 minesweepers, 7 amphibious warfare ships, 10 other ships.

Air Force: Total strentgh: 6,000. 3 F–86F day fighter squadrons, 1 F–86D all-weather fighter squadron.

THAILAND

General: Population: 26,000,000. Length of military service: 2 years. Total armed forces: 134,000 plus 30,000 militarized police. Defense budget: $10,000,000.

Army: Total strength: 90,000. 3 infantry divisions (nominally with 3 brigades each) and 1 composite division with armor.

Navy: Total strength: 18,000 plus 4,000 marines; 7 escorts, 1 minesweeper, 21 light coastal units, 4 amphibious warfare craft, 11 other ships.

Air Force: 40 F–86F Sabres in a fighter-bomber wing, 30 F–84G Thunderjets, T–6 and T–28 armed training aircraft are also in service in close-support squadrons.

THE PROTOCOL STATES

SOUTH VIETNAM

Total armed forces: 216,000. Army: Total strength: 200,000. The army is organized on the basis of 4 Army Corps areas. The organization of antiguerrilla warfare is based partly on the local forces in the "strategic hamlets," partly on small units of the regular army. The greater part of the army is now committed to antiguerrilla operations and only a small part is held in reserve. The combat units are equipped with Ar–15 rifles, 105-millimeter guns, M–113—114 amphibious APC's. They are supported by UH–1A and other American helicopters. There are 6 battalions of paratroops.

There are about 6,000 special security troops under separate command, responsible for political security.

The American military advisers in South Vietnam total some 12,000. About one-third of these are actively engaged. Some American officers are in direct command of Vietnamese Rangers recruited from the ethnic minorities.

Navy: Total strength 10,000, including a marine corps; 3 escort ships, 5 coastal patrol boats (5 more are to be delivered), 300 armed junks for river patrol.

CAMBODIA

Total armed forces: about 28,000.

Army: Total strength, about 27,000.

The Cambodian Army is organized along two main lines: the static defense system of the villages, with a militia officered by small group of officers and NCO's; and the mobile detachments where a popular militia is equally heavily represented. A considerable proportion of the army is engaged on economic and social services. In command terms, it is organized into 29 infantry battalions, 2 parachute battalions, and 1 armored regiment. There is a French military training mission.

Navy: Total strength, 1,100, 4 patrol vessels, 1 support gunboat, 56 small craft. There is a small marine corps.

Air Force: This is concerned solely with internal police and transport duties.

LAOS

In the autumn of 1963, the distribution of forces was roughly as follows:

The Pathet-Lao, some 20,000 strong, occupied the greater part of northern Laos, and were stretched in an arc from the Chinese to the South Vietnamese frontiers.

The Nationalist force of 50,000 men controlled most of the Mekong Valley, the main road axes, the principal agricultural plains, including elements in the Plain of Jars area.

Partisans of the mountain tribes continue to harry the Pathet-Lao forces.

The Neutralist forces were reduced to some 10,000 based largely on some enclaves in Northern Laos and the mountains around the Plain of Jars.

TABLE I.—*Comparisons on defense expenditure*

Country	1953	1958	1962 [2]	1963 Defense budgets: Actual (million dollars)	1963 Defense budgets: Increase or decrease compared with 1962 budget (million dollars)
	As percentage of GNP [1]				
I. NATO:					
Belgium	4.9	3.6	3.4	444	+88
Canada	9.0	6.0	5.1	1,480	−109
Denmark	3.7	3.3	3.5	225	+45
France	11.0	8.0	7.8	4,062	+531
Germany	5.0	3.8	6.0	4,607	+857
Greece	6.1	5.8	[3] 4.5	167	−3
Italy	4.6	4.3	4.0	1,510	+255
Luxembourg	3.2	2.1	1.6	7	
Netherlands	6.2	5.0	5.0	618	+63
Norway	5.7	4.0	4.2	197	+6
Portugal	4.5	4.5	3.9	176	+18
Turkey	5.4	5.4	[3] 5.0	235	−52
United Kingdom	11.3	7.8	7.4	5,146	+327
United States	14.8	11.1	10.7	[4] 52,400	+400
Total				71,274	+2,418
II. SEATO:	As percentage of national income				
Australia			3.3	533	+61
New Zealand			2.4	84	+3
Pakistan			[5] 4.5	240	+30
Philippines			[5] 1.9	63	
Thailand			[5] 0.4	10	
Total				930	+94
III. U.S.S.R. [6]			9.0	15,400	+660

[1] Based on a standard definition of defense expenditure which does not necessarily cover the same items as national defense budgets.
[2] Provisional.
[3] Excludes U.S. military aid.
[4] Includes military aid. This is a higher figure than will actually be expended between mid-1963 and mid-1964.
[5] This is based on official Soviet estimates of the defense budget and national income. On the more realistic figure of $34,000,000,000 for the Soviet defense budget, the proportion of national income was about 18 percent.

The Pathet Lao is now dependent on Chinese and North Vietnamese assistance for equipment and supplies, which mainly reach them by road. Soviet aircraft which were formerly used to supply these forces have been placed at the disposal of the government, but have since become inoperable as their crews and technicians have been withdrawn.

U.S. MUTUAL DEFENSE TREATIES

The following Pacific states have mutual defense treaties with the United States.

JAPAN

General: Population: 95,180,000. Military service: voluntary. Total armed forces: 243,000. Defense budget: $675 million.

Army: Total strength: 171,500 (planned expansion to 180,000 with 30,000 reserves by 1965), 13 divisions of 7–9,000 men, each organized into 3–4 battle groups. One division, based in Hokkaido, is mechanized.

The army has 280 light aircraft and helicopters and 960 American-built tanks including M–4A3's and M–47's. By 1964 the first of 100 Japanese Type–61 tanks will be in service. One Hawk battery will enter service in 1964.

Navy: Total strength: 34,000, 44 escorts, 6 submarines, 129 antisubmarine aircraft (P2V–56, S2F–59; HSS–14).

The naval air component has about 240 aircraft including helicopters.

Air Force: Total strength: 44,000, 1 tactical squadron, 7 fighter-interceptor wings.

The first of 70 F–104J's have been accepted; they will partially replace 100 F–86D's and 340 F–86E's in service. The F–104's and some of the F–86E's are to have Sidewinders.

The first wing of 72 Nike-Ajax missiles and 36 launchers is operational in the Tokyo and Yokohama areas.

TAIWAN

General: Population: 11,510,000. Length of military service: 2 years and reserve liability. Total armed forces: 544,000. Defense Budget: $185,000,000.

Army: Total strength: 400,000 including 80,000 on Quemoy and Matsu, 21 infantry divisions, 2 armored divisions, 1 Nike-Hercules battalion.

Navy: Total strength: 35,000 plus 27,000 marines, 28 escorts, 11 minesweepers, 21 light coastal units, 56 amphibious warfare craft, 27 other ships, (the assault shipping available is enough for one division).

Air Force: Total strength: 82,000; 3 F–86 and F–104 interceptor wings, 1 F–100 fighter-bomber wing.

SOUTH KOREA

General: 25 million; military service: voluntary and conscript; total armed forces: 627,000; defense budget: $40 million.

Army: total strength: 570,000 plus 12,000 Koreans serving in the U.S. Army in Korea.

The 1st Army has 18 divisions plus 50 independent artillery and 7 independent tank battalions.

The 2d Army has 10 divisions. It is planned to reduce the overall order of battle by five divisions.

Navy: total strength: 17,000 plus 25,000 marines, 15 escorts, 12 minesweepers, 11 light coastal units, 23 amphibious warfare craft, 10 other ships.

Air Force: total strength: 15,000, 8 F–86 interceptor squadrons, 1 photo reconnaisance squadron with 12 RF–86F aircraft, 18 C–46 and C–47 transports, 90 miscellaneous aircraft.

PART III: NONALINED COUNTRIES

INDIA

General: Population: 462,000,000; military service: voluntary; total armed forces: 585,000; defense budget: $1,820,000,000.

TABLE II.—*Some strategic indicators*

Country	Armed Forces		1963 defense expenditure	Demographic		
	Total active (in thousands)	As percentage of male population between 15 and 64	Dollars per head of population	Percentage of population in cities of over 100,000	Number of cities of over 100,000 inhabitants	Population density per square kilometer (1962)
Belgium	110.0	3.7	48	28	4	301.30
Canada	124.0	2.3	78	23	12	1.80
Denmark	49.0	3.3	48	25	4	106.88
France	636.0	4.6	79	19	32	83.39
Germany	404.0	2.2	83	30	52	215.36
Greece	160.0	5.8	21	27	3	64.16
Italy	470.0	2.8	30	24	30	169.31
Luxembourg	5.5	4.8	22	0		135.14
Netherlands	141.0	3.9	51	66	14	345.13
Norway	36.0	3.1	54	17	2	11.11
Portugal	102.0	3.7	18	4	2	99.49
Turkey	452.0	5.3	8	13	5	38.46
United Kingdom	429.0	2.5	96	44	50	215.00
United States	2,700.0	4.5	276	29	130	19.69
Total, NATO	5,818.5	3.8			340	21.80
Australia	51.0	1.5	49	53	7	1.36
Iran	208.0	3.2	8	17	8	12.80
New Zealand	12.0	1.6	33	44	4	8.93
Pakistan	253.0	1.0	2	6	6	101.62
Philippines	30.0	.4	2	13	7	83.42
Thailand	134.0	1.7	1	9	1	50.58
Total, all Western alliances	6,506.5	3.2			373	19.80
Japan	243.0	.8	7	27	[1] 38	255.10
South Korea	627.0	9.0	2	19	4	230.85
Taiwan	544.0	19.4	16	18	5	279.32
Total, all U.S. treaty powers	7,920.5	3.2			420	23.27
Albania	35.0	7.1		8	1	59.15
Bulgaria	135.0	5.2		12	3	71.22
Czechoslovakia	185.0	4.3		15	5	115.36
East Germany	116.0	2.4		16	10	158.40
Hungary	99.0	3.2		23	5	108.53
Poland	257.0	3.0		20	22	96.47
Rumania	227.0	3.7		23	6	77.71
U.S.S.R.	3,300.0	6.4	[2] 152	30	174	9.74
Total, Warsaw Pact	4,354.0	5.3			226	13.55
China	2,476.0	1.3		10	[3] 100	73.44
North Korea	310.0	11.5			1	175.18
North Vietnam	262.0	5.7		7	2	90.72
Cuba	120.0	5.2			6	59.39
Total, Communist bloc	7,522.0	2.6			335	31.76

[1] Cities of 200,000 population or above.
[2] Based on a figure of real expenditure of $34,000,000,000.
[3] Estimated.

TABLE III.—*Some estimates of comparative strategic strength, early 1964*

Category	Western alliances	Communist bloc
ICBM's (over 2,500-mile range)	475	100+
Fleet ballistic missiles	192	100
IRBM's and MRBM's (600 to 2,100 miles)		800
Long-range bombers (over 5,000-mile range)	630	200
Medium-range land-based bombers (over 2,000 miles, excluding carrier air-based aircraft)	780	1,400
Carrier-based bombers (over 2,000-mile range)	600	
Carriers (including commando and escort carriers)	38 (37)	19 (2)
Cruisers	33 (25)	124 (248)
Escorts	742 (358)	23
Nuclear submarines	33	446 (55)
Conventional submarines	219 (42)	
Active forces:		
(a) Armies	5,696,300	6,035,000
(b) Navies	1,211,269	661,800
(c) Air Forces	1,658,775	771,000

NOTE.—Figures in parentheses denote ships in reserve.

Army: Total strength: 550,000 plus at least 250,000 in a volunteer reserve Territory Army organized on a battalion basis. At least 13 divisions including 3 recently formed mountain divisions. Another 3 mountain divisions are being formed. All divisions are still suffering from serious equipment shortages. There is one ormored division with Centurions, one ormored brigade with Shermans, and four light tank regiments with AMX–13's.

Navy: Total strength: 16,000; 1 16,000-ton carrier; 16 escorts; 6 minesweepers; 2 light coastal units; 2 amphibious warfare craft; 7 other ships. Naval aircraft include 24 Sea Hawk strike/interceptor planes and 15 Alizé ASW planes.

Air Force: Total strength: 18,000; 4 interceptor squadrons with 25 Mystére IV's each; 4 interceptor squadrons with 25 Gnats each; 4 bombers squadrons with 20 Canberras each; 6 fighter-bomber squadrons with 25 Hunters each. Several Ouragan and Vampire fighter-bomber squadrons; 1 reconnaissance squadron with 8 Canberras. The transport force includes 80 C–119's, 24 Antonov 12's, and about 50 C–47's. Avo 748's and Caribous are being acquired. The 7 Auxiliary Air Force squadrons chiefly fly Harvard and Vampire trainers.

INDONESIA

General: Population: 98,000,000, total armed forces: 375,000, defence budget: $431,000,000.

Army: Total strength: 350,000. The Army is in the main organized only at battalion level, and is scattered throughout the main Indonesian islands. The infantry battalions are equipped with American and some Russian small arms. The Army also has 57 mm. Soviet antiaircraft guns and associated radar equipment, and at least one battery of Soviet 105 mm. howitzers. There are some 30,000 paratroopers. Para-military forces and police: 20,000.

Navy: Total strength: 26,000, 1 Soviet-built heavy cruiser, equiped with surface-to-air missiles (ex *Sverdlov* class), 5 destroyers, at least two of which are equipped with surface-to-air missiles, 4 frigates, 15 escort ships, 27 light coastal craft, 6 landing craft, 20 submarines. The Indonesian Navy has also announced the successful firing of a surface-to-surface missile with a 15-mile range. It is to be assumed that the missile is of Soviet origin. It is not known whether it has yet entered operational service. The Naval Air Arm maintains an antisubmarine squadron equipped with helicopters and *Gannets*. There is a strong Marine Corps.

Air Force: Total strength: 20,000. The Indonesian Air Force is organized into 7 main air areas, each with one main base and some auxiliary bases and combining the separate commands. There are about 450 aircraft; Fighters: Over 100 Mig–15's, 17's, and 19's. A small number of Mig 21's; Bombers: TU–16's, some with an air-to-surface missile. About 50 IL–28's. Some B–26's. Transports: Some IL–14 and C–130 B Hercules. There is also a considerable number of Soviet and Japanese helicopters. There is at least one surface-to-air missile unit, which is claimed to be equipped with an advanced missile.

SWEDEN

General: Population: 7,600,000; length of military service: 10 months for privates and ratings and up to 22 months for officers and NCO's. Reserve service up to the age of 47. Total armed forces: 80,000 including 60,000 conscripts. On mobilization the total would become 780,000. Defense budget: $594,000,000.

Army: Total strength: 10,000 regular and 45,000 conscripts becoming 655,000 after mobilization oragnized into about 12 divisions of 3 brigades apiece. British Centurion tanks including some mounting a 105 millimeter gun are in service in armored and infantry divisions. The first Hawk squadron is now being formed.

Navy: Total strength: 12,000 including 7,000 conscripts, 2 cruisers, 23 escorts, 44 minesweepers, 26 submarines, 26 light coastal units, 2 amphibious warfare craft, 36 other ships.

Air Force: Total strength: 13,000 including 7,500 conscripts, 9 SAAB–29F day fighter squadrons, 3 Hunter day fighter squadrons, 6 Lansen and 9 Draken all-weather fighter squadrons, 6 squadrons of Bloodhound 2 antiaircraft missiles, 12 SAAB–32A Lansen attack squadrons, 5 SAAB–29C and SAAB–32C reconnaissance squadrons. (A combat squadron normally contains 12 aircraft.) In 1964 SAAB–35D and F Drakens will replace the Hunters SAAB–35E will start to replace the SAAB–29C's.

SWITZERLAND

General: Population: 5,720,000. Length of military service: About 4 months initial basic training followed by 12 years in the first reserve and 18 in second line reserves. Total armed forces: 28,500 active and 600,000 reserves. Defense budget: $740,000,000.

Army: Total strength: 500 regular, 16,000 serving conscripts and 550,000 reserves, 3 mechanized divisions, 6 infantry divisions, 2 mountain divisions, 9 border brigades. About 300 Centurion tanks are organic to the mechanized divisions. They have 76-millimeter guns but are to replace these with 105-millimeter ones.

Air Force: Total strength: 6,000 regular, 6,000 serving conscripts and 50,000 reserves, 5 Hunter interceptor squadrons, 11 Venom close-support squadrons, 5 Vampire close-support squadrons, 3 Ju 52/3 transport squadrons. A combat squadron normally has 18 aircraft. Four of these squadrons are manned by full-time personnel and kept at a constant state of readiness.

YUGOSLAVIA

General: Population: 19,070,000, total armed forces: 300,000, defense budget: $830,000,000. Army: Total strength: 250,000 plus 19,000 Frontier Guards, 21 infantry divisions, 3 armored divisions with M-47 and T-34/85 tanks. About 18 independent brigades including a parachute brigade, 1,000,000 reservists.

Navy: Total strength: 30,000, 7 escorts, 9 minesweepers, 2 submarines, 19 light coastal units, 5 amphibious warfare craft, 35 other ship.

Air Force: Total strength: 24,000, 200 F-84G Thunderjets, 250 F-86 Sabres, 100 F-47 Thunderbolts. Staff talks that have taken place between Yugoslavia and the U.S.S.R. in 1963 may result in an early resumption of deliveries of Soviet combat aircraft.

TABLE IV.—*Major nuclear delivery systems, 1963–64*

(A) AIRCRAFT

Name	Origin	Unrefuelled range (miles)	Speed mach No.	(m.p.h.)	All-up weight (lb.)	Became operational	Typical warload
B-52 Stratofortress	United States	10,000	0.88	(665)	420–488,000	1955–61	Quail decoys, 2 Hound Dog, etc.
Tu-20 Bear	U.S.S.R.	7,000	.78	(580)	330,000	1956	25,000 pounds.
My-? Bison	U.S.S.R.	6,050	.85	(600)	250,000	1956	20,000 pounds.
Vulcan B1 and B2	United Kingdom	3,500	.95	(630)	200,000	1957	Blue Steel.
Victor B1 and B2	do	3,500	.95	(630)	200,000	1958	Blue Steel.
B-47 Stratojet	United States	3,200	.83	(550)	200,000	1952	20,000 pounds.
Valiant	United Kingdom	4,500	.84	(567)	175,000	1955	21,000 pounds.
Tu-16 Badger	U.S.S.R.	3,500	.87	(610)	150,000	1955	ASM.
B-58 Hustler	United States	2,000+	2.1	(1,385)	163,000	1960	12,000 pounds?
Tu-? Blinder	U.S.S.R.		1.5	(1,030)	150,000	1962	ASM, 12,000 pounds?
A-3 Skywarrior	United States	3,000	.83	(610)	73,000	1956	8,000 pounds?
Mirage IV	France	2,000	2.3	(1,520)	66,000	1963–65	8,000 pounds?
A-5c Vigilante	United States	2,000	2.1	(1,385)	60,000	1961	6,000 pounds.
Canberra B(L)8	United Kingdom	3,800	.83	(580)	56,000	1955	3,000 pounds.
F-105D Thunderchief	United States	2,000+	2.15	(1,420)	48,000	1961	8,000 pounds.
Buccaneer S.1	United Kingdom	3,860	.95	(720)	46,000	1962	8,000 pounds?
F-4B Phantom II	United States	2,000+	2.6	(1,504)	45,000	1962	7,000 pounds?
Scimitar	United Kingdom	1,400	.97	(710)	35,000	1958	4,000 pounds.
F-100D Super Sabre	United States	1,500	1.3	(864)	28,000	1957	6,000 pounds.
F-104G Starfighter	do	2,200	2.2	(1,450)	27,000	1962	4,200 pounds.
A-4c Skyhawk	do	3,200	.9	(685)	24,500	1956	5,000 pounds.

(B) MISSILES—SURFACE-TO-SURFACE

Name	Weight propellant	Launching (statute weight) (pounds)	Range (statute miles)	In service	Estimated warhead
United States:					
Atlas	Liquid fuel	260,000	9,000+	1959	3 megaton.
Titan 1	Liquid fuel	220,000	9,000+	1961	4 megaton.
Titan 2	Storable liquid fuel	300,000	14,000	1963	5 megaton.
Minuteman	Solid fuel	65,000	6,300	1962	1+ megaton.
Polaris A1	Solid fuel	28,000	1,380	1960	0.7 megaton.
Polaris A2	Solid fuel	32,000	1,700	1963	0.7 megaton.
Polaris A3	Solid fuel		2,800?	1964	0.7 megaton.
Mace B	Turbojet	15,000	1,380	1963	Nuclear or thermonuclear.
Pershing	Solid fuel	30,000	400	1964	20 kiloton?
Redstone	Liquid fuel	61,000	250	1958	?
Sergeant	Solid fuel	10,000	85	1962	20 kiloton?
Corporal	Liquid fuel	11,500	80	1955	20 kiloton?
U.S.S.R.:					
Intercontinental ballistic missile	Liquid fuel	300,000	8,000+	1955	10 metaton.
Intercontinental ballistic missile	Storable liquid fuel			1963	30+ megaton.
Intermediate range ballistic missile	Liquid fuel	122,000	2,100	1959	
Medium range ballistic missile	Liquid fuel		1,100	1961	
Medium range ballistic missile			600		
Submarine surface-launched missile	Solid fuel		400	1959	
Submarine surface-launched missile	Solid fuel		100	1959	
Short-range missile	Liquid fuel		120	1957	
Short-range missile	Turbojet		175–350	1961	

ASM—Air-to-surface missile.
The inconsistency between mach numbers and speed in miles per hour is accounted for by differences in operational ceilings.

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6. "Arms and Stability in Europe," by Alastair Buchan and Philip Windsor. "A report of a Franco-German-British enquiry." Chatto & Windus. 21s.

To be published shortly

7. "Strategic Mobility," by Neville Brown. Chatto & Windus (Nov. 1963).

8. "The Security of Southern Asia," by D. E. Kennedy. Chatto & Windus (summer 1964).

All these books are also published by Frederick Praeger in New York.

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Remarks: Attached is an excerpt from the Congressional Record of 20 August containing remarks of Senator Morse when he placed in the Record a report published by the Institute of Strategic Studies in London. He claims that this document contains much information which is withheld from the American public by the U.S. Government.

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